AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-24. (Canceled)

25. (Previously presented) A tubular radially expansible metal structure, comprising:

a wall comprising an abluminal major wall surface, a luminal major wall surface and a radial wall thickness therebetween, the wall having struts defining through-apertures therein; and

a plurality of expansible rings arranged adjacent one another along a longitudinal axis of the structure, each of the rings defining at least one bridge strut and adjacent rings being linked by at least one bridge formed by cooperation between adjacent bridge struts on adjacent rings;

wherein said at least one bridge exhibits reduced electrical conductivity throughout the wall thickness, and wherein there are a plurality of said bridges distributed throughout the length of the tubular structure and configured and arranged to divide the tubular structure into axially spaced and electrically insulated sections.

26. (Previously presented) The structure according to claim 25, wherein said bridge comprises inter-engaged joint portions.

27. (Previously presented) The structure according to claim 25, wherein said bridge comprises complementary mating portions.

28. (Previously presented) The structure according to claim 27, wherein the mating portions are male-female form-fitting portions.

29. (Previously presented) The structure according to claim 28, wherein the form-fitting portions have a frusto-conical shape.

30. (Previously presented) The structure according to claim 28, wherein the male form-fitting portion comprises a mating head portion having an arcuate end surface, and the female form-fitting portion comprises a mating arcuate end portion with a rebated internal abutment surface to receive the arcuate head portion.

31. (Previously presented) The structure according to claim 27, wherein at least one of the mating portions carries a biocompatible adhesive for enhancing the rigidity of said bridge.

32. (Previously presented) The structure according to claim 27, wherein a portion of reduced electrical conductivity comprises a conductivity reducing layer on an abutment surface of at least one of the complementary mating portions.

33. (Previously presented) The structure according to claim 25, wherein a portion of reduced electrical conductivity comprises a portion in which the chemical composition of said metal structure is modified.

34. (Previously presented) The structure according to claim 25, wherein a portion of reduced electrical conductivity comprises an oxide layer.

35. (Previously presented) The structure according to claim 25, wherein said bridges comprise a sleeve connected to adjacent bridge struts, and wherein said bridge struts are spaced apart within said sleeve.

36. (Previously presented) The structure according to claim 25, wherein the longitudinal axis of said bridge is not parallel to the longitudinal axis of the structure.

37. (Previously presented) The structure according to claim 25, wherein said bridge has the shape of a meander.

38. (Previously presented) The structure according to claim 25, wherein the rings have the shape of a meander.

39. (Previously presented) The structure according to claim 38, wherein the number of bridges connecting one ring with an adjacent ring is less than the number of meanders in one ring.

40. (Previously presented) The structure according to claim 25, wherein the shape of the bridge resembles that of an "S".

41. (Previously presented) The structure according to claim 25, wherein the structure is made of a nickel titanium shape-memory alloy.

42. (Previously presented) The structure according to claim 25, wherein the structure is made of stainless steel.

43. (Previously presented) The structure according to claim 25, wherein the structure is a medical stent.

44. (Previously presented) A method of manufacturing a tubular radially expansible metal structure having an abluminal major wall surface, a luminal major wall surface and a radial wall thickness therebetween, comprising the steps of:

forming a plurality of expansible rings so that the rings are arranged adjacent one another along the longitudinal axis of the structure and each of the rings define at least one bridge strut;

forming bridges between adjacent rings by approximating respective bridge struts of adjacent rings; and

furnishing said bridges between each ring and its adjacent ring with reduced electrical conductivity throughout the wall thickness, such that there are a plurality of bridges distributed throughout the length of the tubular structure, arranged and configured to divide the tubular structure into axially spaced and electrically insulated sections.

45. (Previously presented) The method according to claim 44, wherein the step of forming the expansible rings further comprises the steps of:

providing a tubular workpiece;

mounting the tubular workpiece on a support; and

laser-cutting the workpiece to form meanders in the rings arranged longitudinally adjacent one another, each having a first end and a second end, and at least one complementary mating portion arranged on said first end of each of said rings to mate with a complementary mating portion on the second end of an adjacent ring.

46. (Previously presented) The method according to claim 45, wherein the tubular workpiece has a longitudinal axis of rotation and the direction of the laser cutting beam when cutting the workpiece intersects said longitudinal axis.

47. (Previously presented) The method according to claim 45, wherein the direction of the laser cutting beam for making the bridge struts departs from a direction which intersects said longitudinal axis.

48. (Previously presented) The method according to claim 44, wherein the step of linking each of the rings with an adjacent ring by at least one bridge includes the step of oxidizing abutment surfaces on said bridge struts, whereby each bridge includes a conductivity reducing layer which constitutes a portion of reduced conductivity.

49. (Previously presented) The method according to claim 44, wherein the step of linking each of the rings with an adjacent ring by at least one bridge includes the steps of:

providing an insulating sleeve; and

mounting said sleeve to adjacent bridge struts on adjacent rings, such that the bridge struts are spaced apart within said sleeve.

50. (New) The method according to claim 45, wherein the furnishing step includes generating sufficient heat during the laser-cutting step such that the complementary mating portions are electrically insulated from one another in an assembled state.

51. (New) The method according to claim 45, wherein the furnishing step comprises immersing at least one of the complementary mating portions into an oxidizing agent.

52. (New) The method according to claim 45, wherein the furnishing step comprises radiating at least one of the complementary mating portions with a laser.

53. (New) The structure according to claim 25, wherein the adjacent bridge struts include complementary mating portions spaced apart by a gap.

54. (New) The structure according to claim 25, further comprising a pin inserted in a through-hole formed in each of the adjacent bridge struts.

55. (New) The structure according to claim 54, wherein the pin has a surface made of an electrically insulating material.

56. (New) The structure according to claim 55, wherein the electrically insulating material comprises an oxide layer.

57. (New) The structure according to claim 54, wherein the pin is formed of a non-conductive material.

58. (New) The structure according to claim 57, wherein the non-conductive material is one of a polymeric based material and a ceramic material.

59. (New) The structure according to claim 54, wherein the pin is fixed to each of the adjacent bridge struts.